In the Claims

1. (Currently Amended) A CT system comprising:

a rotatable gantry having an opening for receiving a subject to be scanned;

an HF electromagnetic energy source configured to project a number of HF electromagnetic energy beams toward the subject;

a generator configured to energize the HF electromagnetic energy source to at least a first energy state and a second energy state;

a hub; and

a number of HF electromagnetic energy filters ~~in a spoked relationship with~~ extending outward from the hub and positional between the HF electromagnetic energy source and the subject, the number of HF electromagnetic energy filters including at least a first filter and a second filter, wherein the first filter is ~~positioned~~ positionable between the HF electromagnetic energy source and the subject by rotation of the hub to a first position when the HF electromagnetic energy source is energized to the first energy state, and the second filter is ~~positioned~~ positionable between the HF electromagnetic energy source and the subject by rotation of the hub to another position when the HF electromagnetic energy source is energized to the second energy state; ~~and~~

wherein the first energy state is different from the second energy state;

wherein only one of the first filter and the second filter is ~~positioned~~ positionable between the HF electromagnetic energy source and the subject when the HF electromagnetic energy source is energized to either one of the first energy state or the second energy state; and

wherein an axis of rotation of the first filter and of the second filter is in a direction transverse to the projection of HF electromagnetic energy beams from the HF electromagnetic energy source toward the subject.

2. (Original) The CT system of claim 1 wherein the HF electromagnetic energy source and the number of HF electromagnetic energy filters are rotatable about the subject.

3. (Original) The CT system of claim 1 further comprising:

a set of HF electromagnetic energy detectors configured to generate a set of electrical signals indicative of HF electromagnetic energy attenuated by the subject;

a DAS configured to receive the set of electrical signals; and

an image reconstructor connected to the DAS and configured to reconstruct an image of the subject from the electrical signals received by the DAS.

4. (Original) The CT system of claim 1 further comprising a movable table configured to position the subject within the opening.

5. (Original) The CT system of claim 4 incorporated into a medical imaging device and wherein the subject is a medical patient.

6. (Original) The CT system of claim 4 wherein the movable table is configured to convey articles through the opening wherein the articles include pieces of luggage/baggage and packages.

7. (Original) The CT system of claim 6 incorporated into at least one of an airport inspection apparatus and a postal inspection apparatus.

8. (Currently Amended) A controller configured to acquire CT imaging data at more than one ~~chromatic~~ energy state, the controller having instructions to:

energize an HF electromagnetic energy source configured to project an HF electromagnetic energy beam toward a subject to be scanned to a first voltage potential;

position ~~only a first portion of~~ a filtering apparatus between the subject and the HF electromagnetic energy source along a path of rotation of a hub of the filtering apparatus in a spoked relationship with the first portion during energization of the HF electromagnetic energy source to the first voltage potential such that only a first portion of the filtering apparatus is between the subject and the HF electromagnetic energy source;

energize the HF electromagnetic energy source to a second voltage potential; and

position ~~only a second portion of~~ the filtering apparatus between the subject and the HF electromagnetic energy source along the path of rotation of the hub in a spoked relationship with the second portion during energization of the HF electromagnetic energy source to the second voltage potential such that only a second portion of the filtering apparatus, having different filtration than the first portion of the filtering apparatus, is between the subject and the HF electromagnetic energy source.

9. (Previously Presented) The controller of claim 8 having further instructions to:

energize the HF electromagnetic energy source to the first voltage potential such that a burst of HF electromagnetic energy is projected toward the subject and simultaneously therewith rotate the first portion by the hub between the subject and the HF electromagnetic energy source; and

energize the HF electromagnetic energy source to the second voltage potential such that a burst of HF electromagnetic energy is projected toward the subject and simultaneously therewith rotate the second portion by the hub between the subject and the HF electromagnetic energy source.

10. (Previously Presented) The controller of claim 8 wherein the filtering apparatus includes a single filter and wherein the first portion has a filtering power different than that of the second portion.

11-12. (Canceled)

13. (Original) The controller of claim 9 incorporated into a medical imaging apparatus configured to acquire medical diagnostic data of a medical patient.

14. (Original) The controller of claim 9 incorporated into a non-invasive parcel inspection apparatus configured to non-invasively determine contents within a parcel.

15. (Original) The controller of claim 14 wherein the non-invasive parcel inspection apparatus incorporated into at least one of a postal inspection system and an airport baggage inspection system.

16. (Currently Amended) A method of acquiring imaging data at more than one ~~chromatic~~ energy comprising the steps of:

projecting a first beam of electromagnetic energy along a single projection path toward a subject to be scanned;

positioning a first filter in the single projection path during projection of the first beam by rotation of a hub about an axis of rotation, ~~in a spoked relationship with~~ wherein the first filter forms a spoke extending from the hub;

projecting a second beam of electromagnetic energy along the single projection path toward the subject; and

positioning a second filter in the single projection path during projection of the second beam by rotation of the hub about the axis of rotation, ~~in a spoked relationship with~~ wherein the second filter forms another spoke extending from the hub;

wherein the single projection path is transverse to the axis of rotation.

17. (Currently Amended) The method of claim 16 further comprising the steps of:

energizing an HF electromagnetic energy source to a first voltage to generate the first beam of electromagnetic energy;

rotating the hub to position the first filter along a path of rotation such that the first filter is in the projection path during energization of the HF electromagnetic energy source to the first voltage;

energizing the HF electromagnetic source to a second voltage to generate the second beam of electromagnetic energy; and

rotating the hub to position the second filter along the path of rotation such that the second filter is in the projection path during energization of the HF electromagnetic energy source to the second voltage.

18. (Currently Amended) The method of claim 16 further comprising the step of acquiring imaging data with ~~a~~the first beam of ~~HF~~ electromagnetic energy ~~beam~~ having a signal strength substantially equal to a signal strength of ~~a~~the second ~~HF~~ beam of electromagnetic energy ~~beam~~.

19. (Currently Amended) A computer readable storage medium having a computer program stored thereon and representing a set of instructions that when executed by a computer causes the computer to:

energize an HF electromagnetic energy source to a first voltage to cause the HF electromagnetic energy source to project a first beam of electromagnetic energy toward a subject to be scanned;

rotate a hub to position a first filter, in a spoked relationship with the hub, between the HF electromagnetic energy source and the subject during energization of the HF electromagnetic energy source to the first voltage;

energize the HF electromagnetic energy source to a second voltage to cause the HF electromagnetic energy source to project a second beam of electromagnetic energy toward the subject; and

rotate the hub synchronously with energization of the HF electromagnetic energy source to remove the first filter from being positioned between the HF electromagnetic energy source and the subject and position a second filter, in a spoked relationship with the hub, between the HF electromagnetic energy source and the subject during energization of the HF electromagnetic energy source to the second voltage.

20. (Original) The computer readable storage medium of claim 19 wherein the set of instructions further causes the computer to rotate the first filter and the second filter about the subject along a common path of rotation.

21. (Original) The computer readable storage medium of claim 19 wherein the set of instructions further causes the computer to rotate the first filter about the subject along a first path of rotation and rotate the second filter about the subject along a second path of rotation.

22. (Original) The computer readable storage medium of claim 19 incorporated into a medical imaging apparatus configured to acquire diagnostic imaging data of a medical patient.

23. (Original) The computer readable storage medium of claim 19 incorporated into a non-invasive parcel inspection apparatus including at least one of a postal inspection apparatus and a baggage inspection apparatus.

24. (Currently Amended) A filtering apparatus for ~~a radiation emitting~~ an x-ray imaging system, the filtering apparatus comprising:

a hub having a generally circular cross-section and having a number of ~~connection ports~~filters extending therefrom, the hub configured to rotate about an axis of rotation orthogonal to x-rays emitting from an HF electromagnetic energy source;

a first filter connected to the hub ~~at a first connection port~~, the first filter having a first filtering power; and

a second filter connected to the hub ~~at a second connection port~~, the second filter having a second filtering power different from the first filtering power~~;~~.

~~wherein the first and second filters are in a spoked relationship with the hub.~~

25. (Original) The filtering apparatus of claim 24 wherein the first connection port is positioned 90° along the hub from the second connection port.

26. (Currently Amended) The filtering apparatus of claim 24 wherein the hub is configured to rotate the first filter into a path of HF electromagnetic energy when ~~an~~ the HF electromagnetic energy source is energized to a first voltage and rotate the second filter into the path of HF energy when the HF electromagnetic energy ~~projection~~ source is energized to a second voltage.

27. (Previously Presented) The filtering apparatus of claim 24 wherein the hub is cylindrical or spherical, the filtering apparatus further comprising a third filter connected to the hub at a third connection port and a fourth filter connected to the hub at a fourth connection port, the first, the second, the third and the fourth filters having differing filtering powers and the third connection port being positioned 90° along the hub from the fourth connection port;

wherein the first, the second, the third, and the fourth filters are snap-fit, bolted, or integrated as a single integral body in the spoked relationship with the hub.